USDA Forest Service
Aviation Safety Summary
July 2001

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"A SAFETY MESSAGE FROM THE DIRECTOR"

As I begin my tenure as the National Director of Fire and Aviation Management, I want to take the opportunity to acknowledge all of the good work that is taking place throughout the organization right now.

This past year will long be remembered as having historical significance for us. Not many individuals could respond to a wildland fire situation like we experienced in 2000, then gear up to meet the organizational challenges necessary to implement the National Fire Plan. In addition, we are now engaged in what might promise to be another difficult summer. The skills and dedication of Forest Service Fire and Aviation personnel are outstanding, but the will and attitudes that you embody are remarkable.

This is a good time to pause and reflect on our accomplishments, but also focus on what lies ahead. On our visits and reviews, it is apparent that people are working hard. In some parts of the country, the fire season has been underway for several months already. In the West, it is emerging quickly over extensive areas. This is a good time to anchor against the fundamentals, look out for one another, think ahead, and make a personal commitment to overseeing safe practices. Please take time out of your already busy schedules and help me ensure a productive and safe fire season.

Jerry T. Williams

JERRY T. WILLIAMS
Director
Fire and Aviation Management
Thursday, July 6, 2001

"Firefighter and public safety is our first priority"

Notes to share from Regional Aviation Safety Managers

Terry Beahan, Acting RASM R-6

"Experience is a wonderfull teacher, but it gives the test first and the lesson afterwords." **Mountain Flying Bible** by Sparky Imeson

I believe this quote is an excellent summary of why we have a Safecom system. I used it as my opening remarks for our A/C contract preworks meetings last week. Just wanted to share.

Thanks,
Terry

Jim Morrison, RASM R-4

Hello Folks! I was asked by one of the FAO's on how to get to the FAA A.C.s and this will get you there.....Click on the web address and then click on the 5th link down called "Flight Standard Advisory Circular" then just scroll down to the AC you want to see and click on it (example 90-66a "standard traffic patterns"). Gary Morgan (RASM in R-9) mentioned some AC's awhile back. This site will take you to them. Enjoy, Jim

----- Forwarded by Jim Morrison/R4/USDAFS on 07/12/01 01:04 PM -----

http://www.faa.gov/circdir.htm#topical

Jim Morrison, RASM R-4

JHA Site worth checking out. When you get to the site, on the left side under safety, click on JHA and your in the largest collection of JHA's around! If you want a helicopter JHA just click on "H" and scroll down to what you need, like rappel, ling line, etc… Be sure to check old and new sites.
http://fsweb.r1.fs.fed.us/hr/6700_health_and_safety/index.html

File Code: SE02P08 **Date:** June 11, 2001
Route To: 5100

Subject: DMM, Lock Safe Carabiner

To: Jon Rollens, National Aerial Attack Systems Specialist

Jon;

Late last week several of us participated in two conference calls dealing with concerns that had surfaced over the rappel community switch to the DMM Locksafe Carabiner from the Forge Craft Hook #3144. Glenn Johnston had identified several instances within his region where the DMM carabiner had side loaded on the Sky Genie. In one case this resulted in a rappeler on the tower being temporarily hung up on the rope.

In the second conference call it was decided in the interest of safety to revert back to the Forge Craft Hook #3144 for future Wildland Fire Helicopter Rappel operations. Participants in the second conference call included; Glenn Johnston, Bruce Detrick, Brett McGee, Terry Cullen and myself. This letter is notification that the decision was made to use the Forge Craft Hook #3144 for all Wildland Fire Helicopter Rappel Operations, due to safety concerns with the DMM captive eye, locksafe carabiner.

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Sincerely,

/s/ George M. Jackson

George M. Jackson

Program Leader

FLIGHT SAFETY FOUNDATION
HELICOPTER SAFETY
Vol. 27 No. 3 *For Everyone Concerned With the Safety of Flight* May–June 2001

Helicopter Strikes Terrain During Low-visibility Flight to Mountain Helipad

The accident prompted an airworthiness directive from the New Zealand Civil Aviation Authority requiring emergency locator transmitters in forward sections of helicopters to be moved to less-vulnerable locations.

FSF Editorial Staff

About 0930 local time March 7, 2000, during a charter flight to transport technicians to service telecommunications equipment on a mountaintop in New Zealand, an Aerospatiale AS 350BA struck trees and the ground. The helicopter was destroyed, and all four occupants were killed.

The New Zealand Transport Accident Investigation Commission (TAIC) said in its final report that the helicopter was being flown in conditions of reduced visibility and that the pilot "may have inadvertently lost visual reference with the surface."

The morning of the accident, the pilot fueled the helicopter with Jet A-1 fuel at the Hamilton airport, then boarded one of the technicians. Three other passengers also boarded the helicopter, which departed about 0858 for a positioning flight to Raglan, 23 nautical miles (43 kilometers) to the west. Around Hamilton, weather was clear and sunny, with light and variable winds and a few clouds at 2,500 feet; as the helicopter approached Raglan, there were increasing clouds, a moderate southwesterly wind and light turbulence.

At Raglan, one passenger, who had been trained in some ground-crew duties, helped two other passengers deplane; she then helped the second technician and another passenger (the technician's brother) board the helicopter.

"After checking that all three passengers were properly strapped into their seats, she [the helping passenger, who also deplaned at Raglan] asked the pilot how he would get to Mount Karioi," the accident report said. "This was because she had observed that the upper third of the mountain was obscured by cloud. The pilot's reply was noncommittal but to the effect that they would have a look.

"[The helicopter] departed normally from Raglan at about 0920 hours and was observed to head south, climbing toward

the east side of Mount Karioi until lost to sight against the cloud. The helicopter was not seen again, although a witness southwest of Mount Karioi heard a helicopter fly over toward the west at between 0930 and 1000 hours.

"At some undetermined time after leaving Raglan, [the helicopter was flown] into the forest canopy on the south side of Mount Karioi, colliding with several trees before a final collision with the ground, at an elevation of 1,850 feet."

There were no witnesses to the accident.

The helicopter had been expected to return after 1000, and the pilot's housemate said that the pilot had told her that he might be late in returning because of delays on the ground. On some previous flights, he had been as much as four hours late.

The housemate contacted authorities about 1330, and an air search and ground search were begun. At 1757, a helicopter crew observed the wreckage. Rescuers on the ground determined that there were no survivors. No signal was heard from the helicopter's emergency locator transmitter (ELT).

The pilot was the principal of New Zealand Heliwork, which the accident report described as "essentially a one-man operation." He had received his commercial pilot license for airplanes in 1982 and his commercial pilot license for helicopters in 1989. He had accumulated 2,816 flight hours, including 2,417 flight hours in helicopters, of which 288 hours were in AS 350s. He held a Class 1 medical certificate. People who had seen the pilot before he left the airport that morning described him as "his normal cheerful self."

He had flown 94 hours in the 90 days before the accident, and had last flown the accident helicopter about one week before the accident. His pilot logbook contained entries listing eight previous jobs on Mount Karioi since 1991, but other, nonspecific local entries also could have involved flights to Mount Karioi.

The report said that the pilot had "some previous experience of flying the helicopter up mountainsides in reduced visibility, including on Mount Karioi, but was known to be conservative in doing this, typically only through a thin layer of cloud, 100 [feet] to 200 feet [31 meters to 61 meters] thick."

The accident helicopter was manufactured in 1997 as an AS 350B, imported to New Zealand in 1995 and upgraded in 1996 to an AS 350BA. After accumulating 800 operating hours, the helicopter was exported to Australia in April 1999 for a major inspection by Eurocopter Australia and was returned to New Zealand in October 1999. The helicopter was privately owned but was operated exclusively by New Zealand Heliwork and was the company's principal helicopter. Records showed that appropriate maintenance was performed by Eurocopter New Zealand in accordance with the operator's maintenance manual. There were no outstanding airworthiness directives.

The helicopter had accumulated 1,905 hours in service and its last scheduled maintenance was a 100-hour inspection Feb. 2, 2000, at a total time in service of 1,868 hours.

After the accident, the helicopter's weight and balance were calculated using estimates of fuel quantity and baggage weight, and both the weight and the center of gravity were determined to have been within acceptable limits.

Visibility at Raglan when the helicopter arrived was described as good, with broken clouds, which were "not low," the report said. Nevertheless, the report said, the "upper part" of Mount Karioi was obscured by clouds.

A video recording made by a passenger in the accident helicopter showed that, when the helicopter left Hamilton, the weather was clear and sunny, with good visibility, but clouds increased during the flight. The video recording of the departure from Raglan showed "local continuous cloud obscuring the upper third of the mountain, with a base estimated at about 1,500 feet but with some breaks in the cloud to the east and west."

A pilot who had been flying a helicopter in a cattle-mustering operation on the western side of Mount Karioi until about 0900 said that winds were from the west at about 30 knots, visibility was "okay, with no rain, and cloud was broken away from the mountain but closed in on Mount Karioi with a local base of about 500 feet." The top of the mountain had been obscured by clouds since about 0700, the pilot said.

The crew of a Royal New Zealand Air Force helicopter that was flown southbound past the western side of Mount Karioi about 0845 said that the local cloud base was "pretty solid at 1,500 feet, and no shower activity was noted."

The report said that the differences in the reported cloud base around the mountain were "consistent with the nature of orographic cloud, which is typically lower on the weather side of a mountain, where it forms, than on the lee side."

New Zealand Heliwork's policy required a person on the ground to provide flight following when an aircraft was being flown in a remote area and to alert authorities if a flight was overdue. In this instance, the pilot's housemate performed that function.

The accident helicopter was not equipped with flight recorders (and was not required to be equipped with them) or global positioning system equipment. ATC radar recordings showed no recorded data that correlated with the accident helicopter's flights from Hamilton to Raglan or from Raglan to Mount Karioi.

The accident site was in a forested area on the eastern side of Mount Karioi, about 1,850 feet above mean sea level. The fuselage was inverted on a southerly heading, and the main transmission, rotors, tail boom, right skid, four doors and all

detachable panels had separated from the fuselage and were distributed along the trail of wreckage through the forest.

The cabin floor had collapsed upward, with the most severe damage to the left front; the accident report said that the condition of the cabin floor "was consistent with a severe ground collision while in forward flight, probably nose down and banked left."

The helicopter collided with trees about 27 meters (89 feet) from where the main wreckage came to rest. The pattern of main-rotor slash damage continued to the accident site. The report said that the pattern of the slash marks indicated that the helicopter had been banked 10 degrees to the left and that the length of the wreckage trail and the ground-impact damage indicated that the helicopter had struck the ground at a moderate speed. Main-rotor-blade damage on all three blades was severe, "consistent with multiple tree strikes while rotating under power and at normal rotational speed," the report said.

Inspections confirmed the pre-impact integrity of the engine controls and flight-control systems and indicated "the delivery of engine torque when the main-rotor strike occurred," the report said. Dual collective controls and dual cyclic controls had been installed at the front-passenger seat; there was no evidence of whether the controls had been operated by the passenger. (Typically, the pilot removed the dual controls, but he installed them to allow the helicopter's owner to handle the controls while en route on private flights. The pilot's housemate also had flown the helicopter en route on positioning flights. The flight before the accident flight was a private flight with the owner.) Examination of light bulbs revealed that no warning lights had been illuminated at impact.

The fuel tank was punctured and almost empty, but there was evidence of a "substantial" fuel spill, the report said. There was no post-impact fire.

The impact ejected the ELT from its mounting in the nose of the fuselage and broke the ELT antenna connection and printed circuit board. When the ELT was found, its master switch was in the OFF position. A second, manually operated, personal ELT, also was switched "off"; this ELT probably belonged to the front-seat passenger, the report said.

"The absence of an ELT signal removed the possibility of an earlier alert from overflying aircraft or from the SARSAT [search and rescue satellite] system, as well as preventing any location by an electronic search once the official search had begun," the report said. "The failure of the ELT mounting resulted from the severity of the damage to the nose section of the fuselage, which generated forces well beyond the ELT's design parameters. The broken [antenna] connection and internal damage were direct consequences. The 'off' position of the master switch could have occurred during the ejection of the ELT from the helicopter, or it could have been inadvertently left in that position. The second ELT, being manually operated, could not have produced a signal without action by a survivor."

The report said that investigators could not determine the exact time of the accident or the details of the final flight path. Nevertheless, the report said that the hour-meter reading before the first flight of the day was 1,135.1, and when the wreckage was found, the reading was 1,135.6.

"This gave an elapsed time of 0.5 [hours, plus or minus] 0.1 hours, which would have included the brief flights across Hamilton aerodrome for refueling (about 0.1 [hours]), the flight from Hamilton to Raglan (about 0.3 [hours]) and the accident flight from Raglan to Mount Karioi," the report said. "The inference is that the final flight duration was about 0.1 hours, with a possible maximum of 0.2 hours. A flight time of 0.1 (six minutes) would have been sufficient to fly from Raglan around the east flank of Mount Karioi to the accident site, with some of the flight at less-than-normal cruising speed."

The report said that time might have allowed for two other possibilities — landing at the destination helipad on Mount Karioi, with the accident on the return flight to Raglan, or interrupting the flight to the Mount Karioi helipad, perhaps because of deteriorating weather, and then conducting an intermediate landing at some unknown site on the mountain. Nevertheless, the report said that the first possibility was unlikely because there was no evidence that the technicians had arrived at their destination and that the second possibility was unlikely because a landing at an intermediate site probably would have been more time-consuming than a return to Raglan.

If the pilot approached the mountain from the northeast and flew around the eastern flank, the report said, he "probably encountered thickening cloud with a lowering base on the way. In any event, the height of the accident site ... was almost certainly well above the local cloud base on that side of the mountain. The probability is that the helicopter was being flown in reduced visibility in cloud when the accident occurred."

The report said that hover-taxiing probably was the only method of flying to the top of the mountain in reduced visibility.

"Maintaining visual contact with ground features is vital for navigation and for spatial orientation, as well as to avoid collision with the surface, so a low speed commensurate with the available visibility is essential," the report said. "The ability of a pilot to so fly a helicopter is an acquired skill, which requires mature judgment to decide when the additional risks are justified.

"While the pilot ... had some experience in this type of flying, it is not known whether he decided to adopt it as the means to fly to the top of Mount Karioi when he saw the cloud around the top of the mountain."

The report said that the pilot probably had been flying the helicopter along a mountain ridge toward the mountaintop helipad when he lost visual contact with the ground.

"In such an eventuality, the pilot would be faced with having to temporarily continue in forward flight by reference to his instruments and with two alternative courses of action: either to climb, hoping to avoid terrain, until clear of cloud, or to descend ahead at a low rate, hoping to regain sight of the ground in time to re-establish flight above the surface by visual reference," the report said.

"The circumstances of this accident suggest that the pilot may have attempted the second alternative but was unsuccessful in regaining sight of the ground before flying into the forest canopy on the far side of the valley. …

"If the pilot did in fact decide to attempt the flight in this way, it would indicate an uncharacteristic lapse in his [decision] making. There was no particular pressure to complete the flight, other than standard commercial considerations relating to unproductive flying. It is probable that on the flight from Hamilton to Raglan in good weather, the pilot had no expectation of encountering difficulty resulting from local weather on the mountain. Having arrived at Raglan and [having] observed the cloud on Mount Karioi less than five [nautical miles (nine kilometers)] away, he was probably reluctant to abandon the intended short flight without exploring the actual conditions, and with an intention of turning back if necessary. … [T]he weather conditions, in particular the visibility, probably worsened as the flight proceeded around the mountain. As a result, the pilot may have encountered conditions beyond his personal minimums before he was able to turn back, or it may have been an attempt to turn back which led to the helicopter flying across the valley toward the accident site."

The report said that the accident demonstrated "the vulnerability of the ELT location in the helicopter's nose section."

In recent models of AS 350 helicopters, the ELT is in the rear locker, and some AS 350 helicopters in New Zealand have been modified to move the ELT to the forward section of the tail boom.

"This has proved beneficial to the survival and functioning of the ELT in some previous accidents," the report said.

As a result of the investigation, TAIC recommended that the New Zealand Civil Aviation Authority (CAA) require, where possible, that ELTs on all helicopters be moved to "a less-vulnerable location than the nose section."

CAA accepted the recommendation and issued an airworthiness directive Sept. 28, 2000, requiring that, by Sept. 28, 2001, any ELT located forward of the pilot's seat be moved further aft.♦

[Editorial note: This article, except where specifically noted, is based on New Zealand Transport Accident Investigation Commission report no. 00-003: *Aerospatiale AS 350BA, ZK-HWK, collision with terrain, Mount Karioi, Waitomo, 7 March 2000*. The 15-page report includes a table.]

Helicopter Safety

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SAFE ATTITUDE AIRWARD NEWS
In Recognition of Professional Performance during a Hazardous Aviation Event or Significant Contribution to Aviation Mishap Prevention

July 2001

Teamwork Takes Transmission Troubles from Treacherous Terrain to Tangible Yet Tacky Touchdown

On Saturday, June 23, while working initial attack on a small lightning fire in the mutual protection area less than a mile over the international border of Canada, the crew of Tanker 747, an Erickson type one helitanker, experienced indications of severe transmission problems. Pressure dropped to zero and temperatures were rapidly climbing toward the limits. With the decision that this aircraft had to be put down right away, pilot Scott Woodbury contacted the orbiting air attack and requested immediate directions to the nearest suitable landing spot. With nothing but lake and forest in the area, Tar Lesmeister quickly selected the only possible site, a boggy area along the lakeshore, and gave precise direction to get the crippled aircraft to the area. When Scott tried to set the aircraft down, he found the footing to be unstable and had to continue to move forward toward more rising vegetation.

Finally, as smoke was becoming noticeable from the transmission area, Scott put the aircraft down so it remained level. That's where things got tacky. The bog allowed the aircraft to settle about 4 feet deep until it rested on the retardant tank. During the settling and touchdown, the rotor blades contacted the tops of some of the surrounding brush creating only minor damage. Four days later the aircraft was airlifted out of the bog and returned to the tanker base, where the transmission and a rotor blade tip cap were repaired. Way to go team!

USFS SafeCom 01-243


Tar Lesmeister (left) and John Shearer (right)

The “A” Team

Sam Stivison (left), Rick Willis (center), and JP Johnston (right)

Rick Willis, Contracting Specialist, USDA-Forest Service, Sam Stivison, Chief, Division of Acquisition Management, Office of Aircraft Services, and JP Johnston, Helicopter Management Specialist, USDA-Forest Service, combined efforts in the interest of aviation safety. Rick and Sam awarded contracts only to firms that exhibit the ability to perform safely and effectively. Effective research proves to be beneficial when dealing with aircraft contracts. Nice work, gentlemen!

No SafeCom submitted

An Eye for Detail

Barry Kennedy, from Chena Lakes Helibase, Alaska, had a feeling that something was wrong while observing a recent pilot qualification flight conducting water bucket operations. Barry checked the bucket and found it was unserviceable. The bucket didn’t have a model number or capacity markings nor did it have “cinch rings, markings or loops in the bucket” needed to adjust its capacity. Being concerned for the crew’s safety, Barry approached the pilot with this information. The pilot confirmed the problem and the bucket was removed from service. Great job, Barry! OAS SafeCom 01-90

Barry Kennedy

When the Going Gets Tough, the Tough Get…


Tammy Westover

Tammy Westover, a helicopter manager employed by the State of Alaska, observed several serious errors made by one of our helicopter operators, during interagency fire activities. Tammy quickly analyzed the situation and made the difficult, but correct decision to terminate flight operations with the operator. Fire behavior was extreme and helicopters and pilots were in high demand making the decision to ground the operator all the more difficult. Our special thanks to Tammy, her unwillingness to compromise safety, and for making that tough call.

No SafeCom submitted

SAFE ATTITUDE

The ONLY Way NOT to Fly!

Aviation Safety Offices

www.aviation.fs.fed.us - www.oas.gov

SafeCom Summary

Thanks to the professionalism and safety consciousness of our employees, contractors and cooperators, we have made it through half the year without an accident. We've had a few close calls and have been very lucky. We must remain alert and not let complacency set in. It's already been a long season for many, so be aware of the signs of fatigue as well as dehydration.

A couple recent incidents include a contract helicopter from Ely, MN that experienced transmission problems and sank in the mud after making an emergency landing near a lake. This incident occurred in Canada on the initial attack agreement. A Beaver working out of the Ely Seaplane Base made a precautionary landing in a lake after experiencing a vibration and trace of oil on the windshield. The engine had to be replaced. Fortunately, no one was injured in either of the above incidents.

The State of Idaho Department of Lands recently lost a Single Engine Airtanker fatally injuring the pilot. We share in their grief of the loss of Doug Gilbert, and extend our sympathy to family, friends and co-workers.

Our deepest sympathy is extended to the families, friends and co-workers of Tom Craven, Karen Fitzpatrick, Devin Weaver and Jessica Johnson, the four firefighters fatally injured on the Thirty Mile Fire. You are in our thoughts and we share in your sorrow. Get Well Wishes are extended to Jason Emhoff who was seriously injured.

Our SafeCom system is working quite well for incident reporting. We would like to remind everyone: employees, contractors and cooperators that the SafeCom system is NOT intended to be used for disciplinary action. Its purpose is for aviation safety. Some examples of what we do with the SafeCom data is:

- Identify and analyze trends for mishap prevention
- Support policy outlined in various handbooks, guides, and handbooks
- Apply the Human Factors Analysis Classification System research. Over two-thirds of all aviation accidents and incidents are caused by human performance errors.

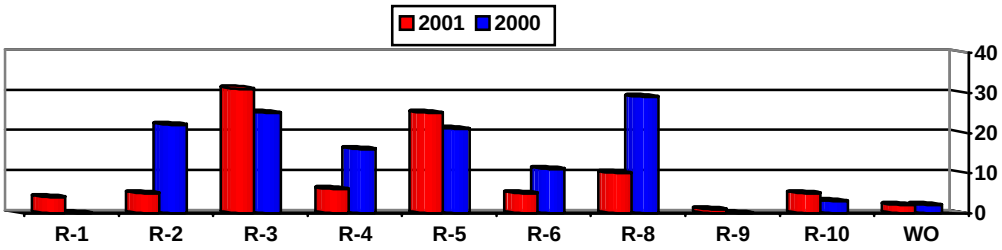
There have been 237 SafeComs filed this calendar year (January 1 – June 30) compared to 299 for the same time period last year.

Included in this report are representative samplings of the SafeComs reported in June of this year. To view all the USFS SafeComs click on the link to SafeComs below. Pick the options you want to search for, then click on submit, or simply click on submit to view all of the latest SafeComs. http://www.aviation.fs.fed.us/safecom/psearch.asp

The following charts are based on SafeComs that occurred from June 1 through June 30 of this year and last year. There were 94 SafeComs reported this May compared to 129 last May.

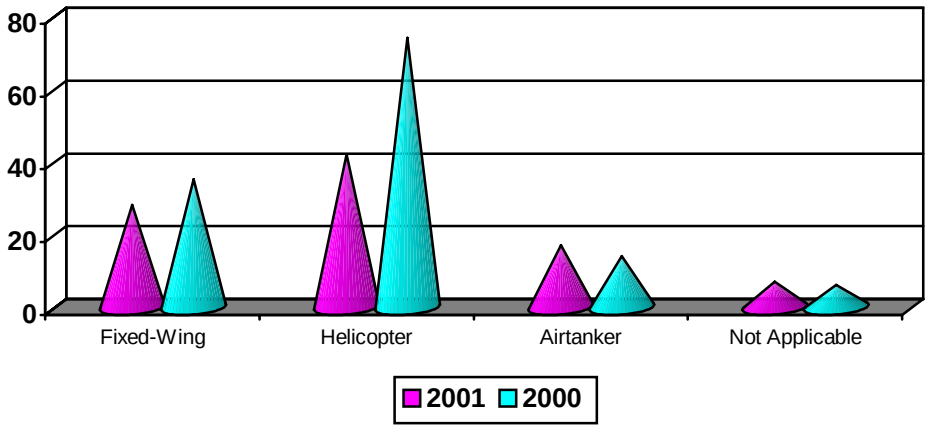
SafeComs by Region

The chart below shows the number of SafeComs reported by each region for June of this year and last year. SafeComs reported in regions 3 and 5 make up over 50% of all the SafeComs this reporting period.



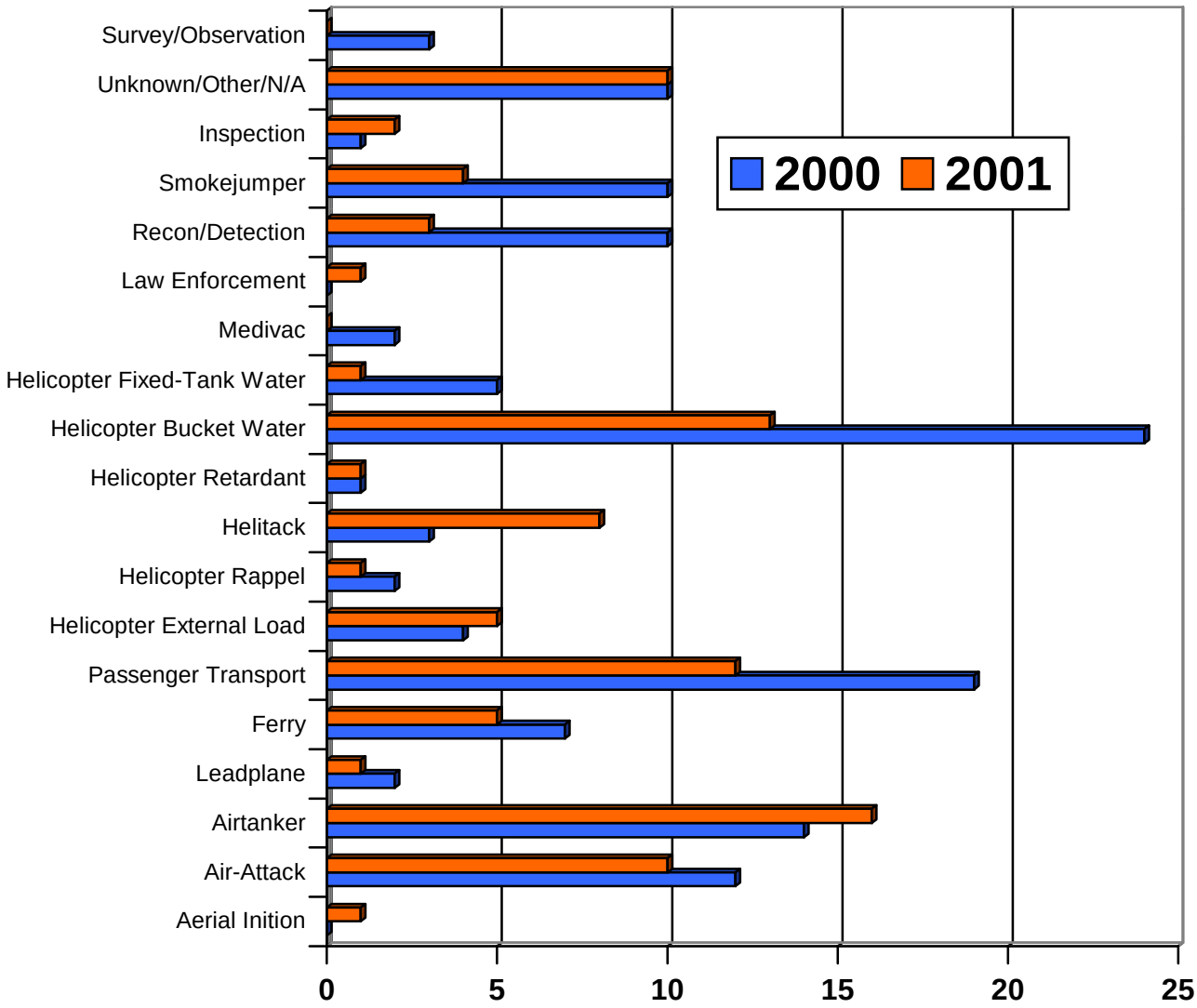
SafeComs by Aircraft Type

Helicopter SafeComs accounted for 45% of the SafeComs this year compared to 57% last year. Fixed-wing accounted for 30% of the SafeComs this year, which is comparable to 27% last year. The percent of Airtanker SafeComs increased from 11% last year to 18% this year. The charts below show the number of SafeComs reported by aircraft type for June of this year and last year.



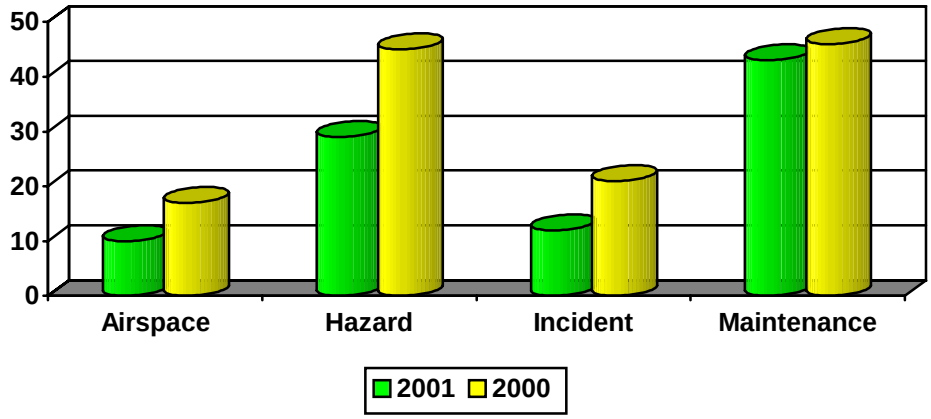
SafeComs by Mission Type

This year airtanker retardant drops had more SafeComs reported than any other mission, 17% compared to 12% last year. Last month helicopter bucket water drops had more SafeComs reported than any other mission. Helicopter bucket drops had 14% of the SafeComs this year compared to 20% last year. Passenger transport SafeComs were down this year to 13% from 17% last year. Air-Attack SafeComs were comparable, 11% this year and 10% last year. Helitack SafeComs increased this year to 9% compared to 3% last year. The chart below shows the numbers of SafeComs reported by mission type for June of this year and last year.



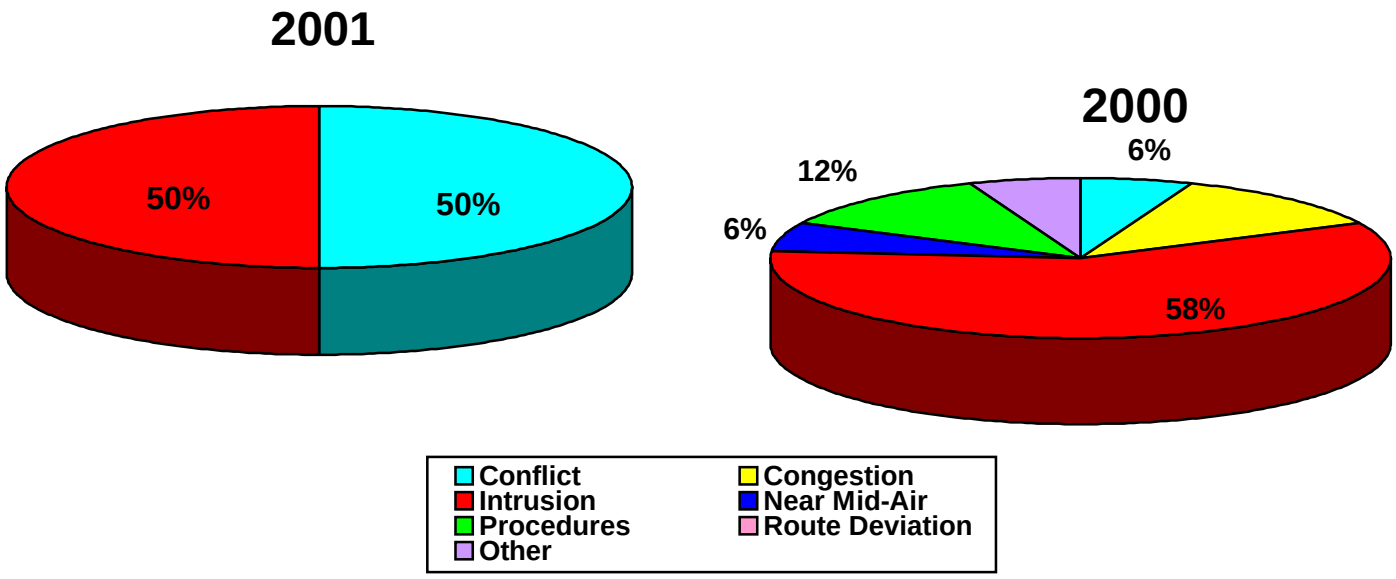
SafeComs by Category

SafeComs on Maintenance issues were the most reported this year, 45% compared to 36% last year. The second most reported SafeComs were hazard, 35% this year and 31% last year. Incident SafeComs were 13% this year compared to 16% last year. Airspace SafeComs were comparable at 11% this year to 13% last year. The chart below shows the number of SafeComs reported by category for June of this year and last year.



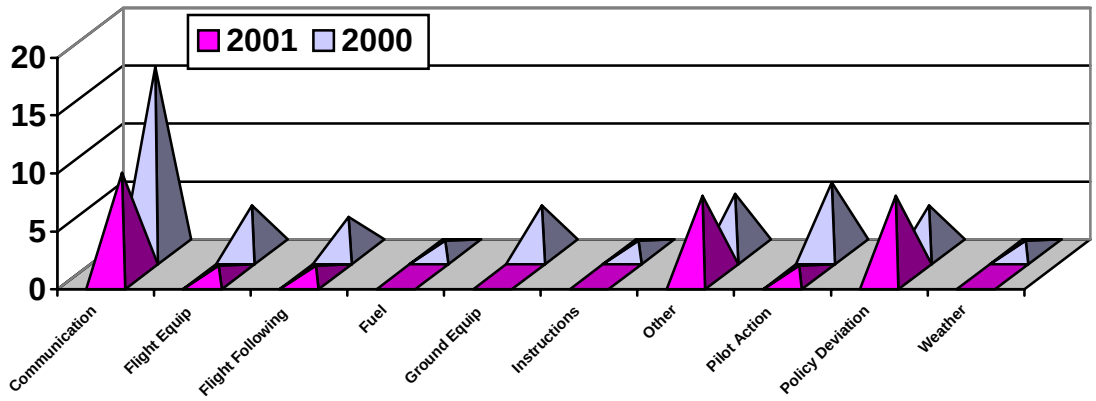
Airspace SafeComs

There were 10 SafeComs reported in this category this year compared to 17 last year. There were five intrusions this year compared to 10 last year. We've had five airspace conflicts this year compared to only one last year. Last year there were also two congestions, one near mid-air, two procedures and one other Airspace SafeComs reported. The charts below show the percent of Airspace SafeComs by sub-category for June of this year and last year.



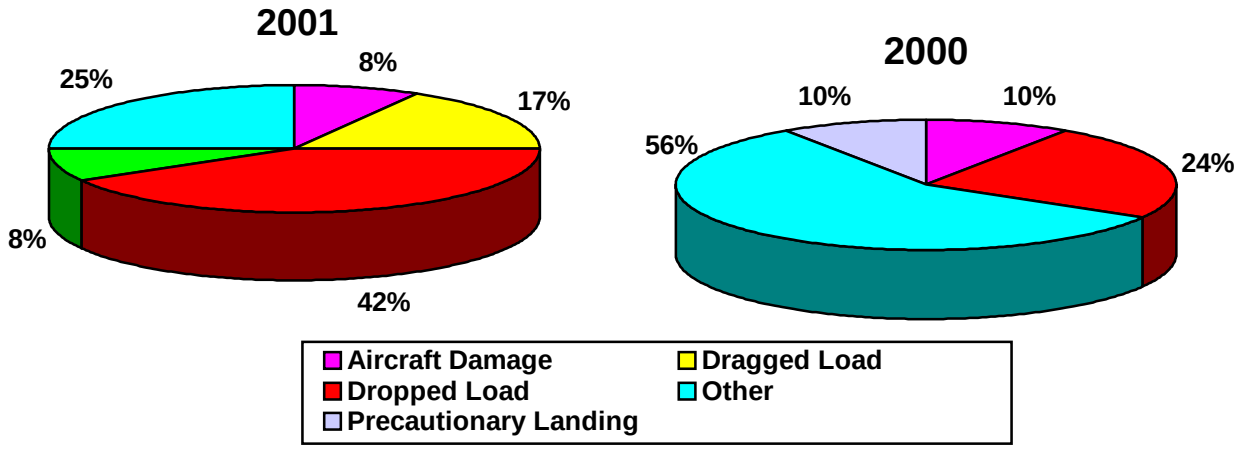
Hazard SafeComs

There were 29 SafeComs reported in this category this year compared to 45 last year. Communications were the biggest problem in this category both this year and last year. They accounted for 32% of the Hazard SafeComs this year and 36% last year. Communications are and have been an issue for some time, repeat and double check and ask again and again if your not sure or it doesn't make sense. Policy deviations accounted for 24% of the SafeComs in this category compared to 9% last year. Knowing and abiding policy is critical to the safety program. Looks like we need some help here. The chart below shows the number of Hazard SafeComs reported by sub-category for June of this year and last year.



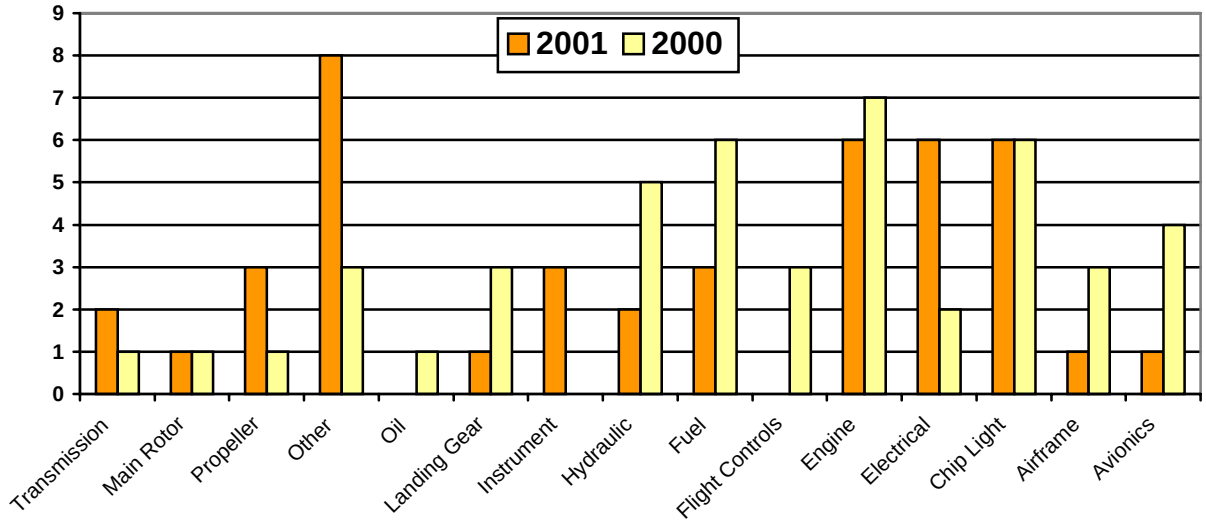
Incident SafeComs

There were 12 SafeComs reported in this category this year compared to 21 last year. This year there were 5 dropped load, three dragged load, one aircraft damage, one ground damage and three other SafeComs reported. Most of them last year (12) were reported as other, two aircraft damage, 5 dropped load and two precautionary landings. The charts below show the percent of Incident SafeComs by sub-category for June of this year and last year.



Maintenance SafeComs

Maintenance SafeComs were very comparable between this and last year, with 43 this year and 46 last year. Engine, electrical and chip light were the most reported this year with fuel, engine and chip light the most reported last year. The chart below shows the number of Maintenance SafeComs reported by sub-category for June of this year and last year.



SafeCom #: **01-181** Date: **06/5/2001** Time: **1334**

Location: **Jersey Fire** State: **Arizona** Region: **3**

Mission Type: **Fire, Reconnaissance** Procurement: **Rental**

Aircraft Type: **Cessna 310**

Narrative: While circling the Jersey fire in a righthand pattern at 500' AGL directing initial attack units in to the fire, looking for spot fires and general fire behavior: a red and white Beech Bonanza (v tail), unknown N# came from the 5-o'clock position across our wind screen to the 11-o'clock position and exited the area to the West. The distance between the two a/c was between 1/4 to 1/2 mile.

Corrective Action: No evasive flight manuevers were undertaken. Attempts to contact the a/c on unicom were unsuccessful. Subsequent radio traffic with Show Low did not indicate that the other a/c originated it's flight from there. No TFR was in place at the time of the incident. FAO's comments; After discussion with Forest recon personnel, fire was reported by the recon a/c, approx 1/4 to 1/2 acre and the a/c was in the fire area for approx 30 min. No other a/c were responding or dispatched to this incident. It is not felt that if a TFR would have been ordered, it would have been in place or aided in the avoidance of this incident. See and avoid rules apply, keep your eyes open. RASM COMMENTS: Agree with FAO. Smoke will often attract aircraft. It is easy to have most of your attention focused on the fire and not keep your scan up.

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SafeCom #: **01-239** Date: **06/23/2001** Time: **1555**

Location: **Martis Fire** State: **California** Region: **5**

Mission Type: **Fire, Air-Attack** Procurement: **CWN**

Aircraft Type: **Cessna 206**

Narrative: While flying air attack on the Martis fire on 6/23/01/at appr 1555 hrs, observed a fast flying milatary fighter jet below are altitude of 11500 M.S.L. T.F.R. in effect for 12,000 msl and 6 miles.

Corrective Action: With no a/c information, there's not much chance of tracing this aircraft. As I've stated in the past, the closure of airspace doesn't guarantee anything since there's always the 10% at least that don't get the word. Pilots/crews MUST remember that they are NEVER up there ALONE! EXPECT THE UNEXPECTED!! RASO, R-5

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SafeCom #: **01-182** Date: **06/5/2001** Time: **1230**

Location: **Miles City Airport** State: **Montana** Region: **1**

Mission Type: **Training, Smokejumper** Procurement: **Fleet**

Aircraft Type: **Shorts C23**

Narrative: While turning from crosswind to downwind in the airport traffic pattern, an unannounced aircraft penetrated the airport traffic area at pattern altitude transitting the airport from northeast to southwest. The crew took immediate corrective action. Ground observers noted that the Beechcraft did not make any course or altitude change. An active NOTAM was on file with Great Falls Flight Service for parachute jumping at the Miles City airport from 1800Z to 1930Z.

Corrective Action: Since the Miles City airport CTAF is 123.0, the transitting aircraft may have been monitoring 122.8. Repeated announcements on the part of the agency aircraft prior to and immediately following the corrective action resulted in no response from the other aircraft. Visual alertness around uncontrolled airports is essential. RASM Comments: Due to the flight profile, workload in the cockpit, and the brief nature of this event, the Sherpa Pilots were not able to get the identification number (N number) of the intruding aircraft. No further follow-up on the intruder is practical. As noted above, See-and-Avoid is still our best defense at non-controlled airports. Be alert for any non-participating aviators!

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SafeCom #: **01-167** Date: **06/2/2001** Time: **1600**

Location: **Big Fire, SHF** State: **California** Region: **5**

Mission Type: **Fire, Retardant Drop (Airtanker)** Procurement: **Contract**

Aircraft Type: **Lookeed SP2H**

Narrative: After dropping on the "BIG" fire, T-XX was on the climb out down the canyon, T-ZZ was in a decending right hand turn and passed 150 ft off the nose of T-XX. We talked to the pilot of T-ZZ, and he said that he'd never seen us. Canyon was deep and narrow. We need to allow more room for each other under these conditions. This is really early fire season and we all need to be heads up for these conditions.

Corrective Action: All parties involved met and discussed this incident and the corrective actions that would be implemented to prevent it from happening again. I spoke to the leadplane instructor pilot in detail about the incident after I received the Safecom. There were a number of factors the most likely contributed to this incident. Some of these factors follow; 1. Operating in and out of a deep narrow canyon which restricted visibility. 2. The next tanker in the drop sequence moving into position without communicating with the leadplane his intention and location. Lead pilots indicated that this is not an uncommon practice. In this type of terrain, this could have been a prime factor. 3. The leadplane not establishing absolute communication and control over the location and sequence of the tankers immediately involved in the drops. 4. Any form of “Assuming” “I know where he/she is or he/she knows

where I am!" 5. Rushing the mission! This was one incident with one set of conditions. The next incident may be very different but the "Human Factor" will be there and always part of the conditions. These are all very experienced and professional crewmembers and yet something went wrong. Fortunately, nothing tragic occurred. It has been strongly suggested that the "TCAS" system be considered for all aircraft directly involved in direct fire fighting operations. This system is installed in all the leadplanes and we know it works. Why not the tankers operating in the very same environment? It's a safety tool that could ease the crews workload and possibly prevent the loss of life. No further action required at this time. RASO. R-5

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SafeCom #: **01-264** Date: **06/24/2001** Time: **1400**

Location: **Queens** State: **New Mexico** Region: **3**

Mission Type: **Fire, Passenger Transport** Procurement: **CWN**

Aircraft Type: **Bell 205**

Narrative: While on a fire just south of Sitting Bull Falls, during the first insertion of a hot shot crew, the Helispot Manager noticed a civilian within 10 ft. of the tail rotor. I was able to get the civilian to move away to a safe area and distance from the helicopter via hand signals. After unloading the helicopter and keeping a careful eye on the civilian. Helispot Manager advised the pilot of the situation at hand and told pilot not to do anything until given the ok by Helispot Manger. After departure of helicopter, Helispot manager spoke with the civilian and noticed multiple abrasions on all extremeties. Apparently, the civilian had been lost for some time, saw the helicotper and came to where it landed for assistance. Helispot Manager notified HEBM of situation at hand. Civilian was flown to helibase due to medical state, fire behavior, and existing weather at the time. Just a reminder to all no matter how clear the area looks always Look up, Look down, Look all around. This tactic definitely helped with the situation that occured to me.

Corrective Action: RASM COMMENTS: Sounds like a reasonable response based on what was occurring at the time. Still following up with folks that were on site for more details.

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SafeCom #: **01-271** Date: **06/30/2001** Time: **1900**

Location: **DRO Airtanker Base** State: **Colorado** Region: **2**

Mission Type: **Fire, Retardant Drop (Airtanker)** Procurement: **Contract**

Aircraft Type: **Lockheed P2V**

Narrative: During a fueling at the base, the co-pilot received an un-expected serge in the fueling hose. Fuel was splashed on the co-pilot but was contained on the nomex flight suit.

Corrective Action: Airtanker base manager was briefed on what had happened and contact was made with the fueler to ensure that communication and eye contact was kept during the fueling process. RASM R-2. This was the approprate corrective action. However, due to the

posibility of static electricity igniting the flight suit of the co-pilot, extreme caution should be taken when one is soaked in fuel; ie, wet the person down with water and get the flight suit off while in a shower or while being wet down.

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SafeCom #: **01-216** Date: **06/17/2001** Time: **1500**

Location: **Happy Camp, Helibase** State: **California** Region: **5**

Mission Type: **Inspection, Unit** Procurement: **CWN**

Aircraft Type: **Kaman 1200**

Narrative: Kmax was dispatched to the Happy Camp Helibase in support of the Peak Incident on the Klamath National Forest. Upon the pre-use inspection of the helicopter, the Bambi bucket was noted to have kevlar lines in place of the rotation resistent wire rope per the CWN contract - pg. 63 H.2.5. (22)(a)-. Pilot had stated they had a wavier to use the kevlar lines, but did not have the wavier with him. After discussion with xxx xxxx (HOS), xxxx xxxxxx (HPM) and xxxxxx xxxxx (FAO), there is no known waiver for kevlar lines to be used that they are aware of. It was then decided to release the K-max back to his home unit without pay. xxxx xxxxxxx did a follow-up on this incident with xxxx xxxxxx (National Contacting Officer).

Corrective Action: That was a good "HEADS UP" and good call by the Happy Camp crew and the follow up.. I've never heard of a waiver for those lines either. Lets all keep are guard up for things like this. RASO, R-5

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SafeCom #: **01-230** Date: **06/21/2001** Time: **2100**

Location: **Love Field, Prescott** State: **Arizona** Region: **3**

Mission Type: **Fire, Air-Attack** Procurement: **Cooperator**

Aircraft Type: **Beechcraft 55**

Narrative: We were dispatched from Prescott, AZ on 06/21/2001 at 0630 hours. We flew various fires in southern Arizona, landed at Marana Northwest Airport (E14) for fuel and then returned to Prescott. At 1726 we were dispatched from Prescott to the Lookout fire located on the Kaibab National Forest. We returned to Prescott at 2100 which gave us a 14 hour 30 minute duty day. Pilot and ATGS did not realize they were exceeding the duty limitations until too late to remedy the situation.

Corrective Action: RASM COMMENTS: Duty day requirements are in place as a mitigating measure to deal with fatigue. Foregetting, overlooking, loosing track of, when you need to be on the ground MAY BE an indicator of guess what....fatigue. This might not be the case here, but is hopefully serves as a good reminder that fatigue can sneek up on all of us without our knowing it. We still have a long way to go this season, lets make sure we are not getting too mission driven and getting the rest we all need.

SafeCom #: **01-218** Date: **06/19/2001** Time: **1440**

Location: **Whitetail Fire** State: **New Mexico** Region: **3**

Mission Type: **Fire, Detection** Procurement: **CWN**

Aircraft Type: **Unknown**

Narrative: On 6/19/01 an adjoining Forest's (forest #1)Recon Plane came over on the neighboring National Forest (forest #2) to look at a Fire. The Whitetail fire was putting up a pretty good smoke and the Recon plane was flying near the boarder of (forest #2)and asked (forest #1)Dispatch if they could fly down and check on it. (Forest #1)Dispatch approved it. AFTER Recon plane was over fire they notified (forest #2)dispatch that they were over fire.

Corrective Action: FAO talked to Air attack and to (Forest #1)Dispatch. This fire was approx. 20 miles inside of (Forest #2)Boundry. (Forest #2)Observer plane had just been over the Fire earlier. We did not know that the Recon Plane from (Forest #1)was on Forest untill he called Dispatch to give rundown. (Forest #1)Dispatch will give better breifing on boundries and Air Attack knows them well now. RASM COMMENTS: Problem and solution to this is obvious. Lets follow established procedures folks!

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SafeCom #: **01-202** Date: **06/14/2001** Time: **1000**

Location: **McCall** State: **Idaho** Region: **4**

Mission Type: **Fire, Smokejumper** Procurement: **Fleet**

Aircraft Type: **F14 Chute**

Narrative: On Thursday morning of 6-14-01, Jumper made a practice jump with a F-14 parachute, number 4-611 large. This chute had new steering lines installed earlier this year and had been jumped and inspected on 5-31-01 with no abnormalties prior to the line breakage. The practice jump exit itself went as per normal, however a fraction of a second after canopy opening shock, Jumper could hear and feel the steering line break. The break occurred to the steering line attached to gore 5, about 6 inches below the limiter insertion and appeared to be a full stress/tension break as if though the line hung up somewhere and broke. There were 1 inch size tears in gore 1;section c (two holes), and section b;(one hole), also gore 3;section c (one hole). These holes definitely looked more like tears rather than burns as no burn glazing was apparent. These tears are mid to upper gore and appear to be unrelated to the steering line break. We also ruled out the broken end of the steering line rebounding and causing this damage, as the limiter would not have allowed this to happen. There was also a small burn hole on the skirt hem at 22;section a,and could be involved with the line break, however I can't quite logically see the relationship. We looked at another chute that the rigger had packed and everything appeared normal, in fact the excess slack in the steering lines were distributed throughout the stows, rather than taken out at anyone single location. This line break only affected one steering opening slot on the left side of the chute, making a turn in that direction only half as effective.

Corrective Action: At this time we will confere with xxx xxxxxx @ MTDC to identify and further investigate the break to identify the cause and recomend corrective action. RASM Remarks:6-15-01, I spoke with Master rigger in McCall and he stated that the jumper had landed without further incident. The affected chute has already been boxed up and is on it's way to Mr. xxx xxxxxx of MTDC for investigation. Investigation ongoing.

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SafeCom #: **01-207** Date: **06/13/2001** Time: **Unknown**

Location: **Redding Airtanker Base** State: **California** Region: **5**

Mission Type: **Fire, Retardant Drop (Airtanker)** Procurement: **Contract**

Aircraft Type: **Douglas DC-4**

Narrative: T-XXX landed RDD for load and return to Rory Fire. Retardant loaders querried the pilot for amount of retardant to load. Pilot requested 2000 Gal. and remained in the cockpit. Upon departure back to Chester, a lack of climb performance was noted. After landing at Chester the pilot pulled the loading plugs and noticed an overload condition. On 6/14 a phone call was recieved from the Redding Air Attack Base indicating that T-XXX was overloaded by aproximately 500 gallons.

Corrective Action: Discussed situation with Redding Airbase to try to identify possible cause. Discussion still underway. This situation stresses the need for Airbase and Retardant Managers to discuss and implement the combination of the manual and micro-motion procedures together when filling these tankers. (The plugs still work!!) FAO I followed up with the crew at the RDD tanker base. According to them, the following information was that; 1. The Micro-motion had just been calibrated and showed 1803 gallons had been loaded into the tanker. 2. XXXXX XXXXXXXX witnessed the loading and an hour later pulled the top plug and no retardant came out of the aircraft. 3. They feel that in would be impossible to overload the tank by 500 gals. as it is a 2200 gal tank and the retardant would spill out the vents. 4. It was stated that this tanker had simular problems last season. I'll attempt to track this tanker in the future with the Redding and Chester bases. No further action required at this time. RASO, R-5

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SafeCom #: **01-240** Date: **06/22/2001** Time: **1430**

Location: **Gros Venture Trng Site** State: **Wyoming** Region: **4**

Mission Type: **Training (Rappel)** Procurement: **Contract**

Aircraft Type: **Bell 206L4**

Narrative: This safecom was prompted by an incident that occurred during a proficiency rappel operation. The first load of the day consisted of two rappellers and a spotter out of an exclusive-use Bell 206 L-IV aircraft.During the flight I mentally reviewed the procedures preparing myself for the rappel. Everything was exactly to the standard procedures, the spotter signaled to remove seat belts and we both proceeded. The next step started a sequence of errors from myself. As the spotter signaled to drop rope bags an old saying went through my

head, “clear the skid”. This is something I have embedded in mind from a past rappel crew in which we used an A-Star, and hence threw my rope bag over the skid. Currently, this crew uses an L-IV in which rope bags are dropped in-between the belly and the skid. Instantly the spotter recognized the error and communicated with the pilot about the problem. The pilot and spotter discussed landing or dropping ropes. The pilot responded with a clear statement, “power is good, go ahead and unlock and drop ropes”. At that time the spotter yelled, “remove genies” and he proceeded to release ropes”. Neither of us (the two rappellers) had refastened our seat belts. After the ropes were removed and we unrigged our genies the spotter cleared the ropes from the ship. Last, we refastened our seat belts and returned safely to the helispot.

Corrective Action: Operations were discontinued and a debriefing of the situation took place. Rappel crewmembers need to remember model specific procedures. Ropes for Bell L-Models deploy out between the fuselage and the skid. Spotter made the mistake of not having rappellers attach seatbelts before releasing ropes. RASM Remarks: "Old habits are hard to break".....We've heard the saying hundreds of times. This is an excellent reminder of staying focused and constant review of the training procedures in your mind as you prepair to execute your mission. I very much appreciate the submittial of this SAFECOM, again, as a reminder this COULD HAPPEN TO YOU, we have new personnel, new personnel in new positions, new personnel in different model aircraft with different procedures. Stay mentally tough, focused and prepaired for the mission, don't allow yourself to become distracted. Please share this safecom with your crews. Lessons learned!

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SafeCom #: **01-252** Date: **06/17/2001** Time: **1930**

Location: **Canyon Fire, BDF** State: **California** Region: **5**

Mission Type: **Fire, Helitack** Procurement: **Contract**

Aircraft Type: **Aerospatiale 350B3**

Narrative: INF Helicopter 525 received an initial attack dispatch to a CDF assist near Riverside. We received all pertinent information from dispatch; radio frequencies, phone numbers, order numbers, map refrences and coordinates. After establishing contact with San Bernardino dispatch and discontinuing flight following with Inyo we received a new order number, new frequencies and phone contacts for the same fire which was turned over to BDF. After two fifteen minute checkins we began trying to contact Air Attack 330 and Canyon IC on the frequencies given to us when we were 10 minutes out from the fire. At five minutes out from our assigned fire we still had not made positive contact with the resources on the fire. The only contact we had made was with an adjoining fire using the same frequencies we had been given by dispatch. We contacted BDF dispatch and queried them on any frequency changes. They gave us two new frequencies and they were the same as the original dispatch. We programmed these in but could still not make contact with anyone on the fire. We then diverted to Hemet-Ryan because we were low on fuel and could not establish contact with the fire. Taking into account we could not make positive contact we set down at Hemet-Ryan to try and get the right information. We tried to call the number for the ICP given to us by dispatch. This number turned out to be disconnected. We were finally able to get a hold of BDF expanded dispatch and get the correct information for our fire. Unfortunately this whole process took us past shutdown time and we were unable to perform our mission we were ordered for.

Corrective Action: It appears that there may have been a little confusion in the dispatch function. The crew followed the proper steps and took the proper action to try to remedy this situation. Good Job!

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SafeCom #: **01-164** Date: **06/1/2001** Time: **1030**

Location: **Chimney Helibase** State: **Arizona** Region: **3**

Mission Type: **Fire, Aerial Ignition (Prescribed)** Procurement: **Contract**

Aircraft Type: **Bell 407**

Narrative: During recertification and testing of the PSD machine,prior to ignition of a burn,one of the crew members was struck in the eye by a small piece of Potassium Permanganate. The crew immediately flushed the eye with water and saline and flew the crewmember and EMT to the Hospital to have the eye checked. All members of the training/recertification were wearing safety glasses at the time of the incident. The crew member injured was removing the metal bucket from under the machine to a designated cleared area 20 feet away when a spinning ball sprayed the material out of the bucket. Somehow the material came up from under the safety glasses and got into the eye. The crew completed the recert/testing with all members involved wearing goggles.

Corrective Action: Crew recommends that all individuals involved in the training wear goggles instead of safety glasses from now on and this be placed in the Aerial Ignition Guide.

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SafeCom #: **01-248** Date: **06/19/2001** Time: **1600**

Location: **Fawndale Fire** State: **California** Region: **5**

Mission Type: **Fire, Helitack** Procurement: **Multiple**

Aircraft Type: **Multiple**

Narrative: During the Fawndale Incident on the Shasta-Trinity Ranger Unit, a helibase was established using a small facility at the Shasta Lake Ranger District office, Shasta-Trinity National Forest. The helipad was designed to accommodate one Type 2, or two Type 3 helicopters. On one of my return trips to the office, I noticed three Type 2 helicopters parked within the designated helibase. A Forest Service HEMG was with me at the time and it appeared to both of us that they were parked too close to each other. I approached the XXX helibase manager and asked his opinion of the parking arrangement and he stated that he was closely monitoring the landing helicopters and as long as they had enough room to safely land, he was allowing it. I asked if he knew the size of the required "safe circle" around Type 2 helicopters. He stated he didn't so I asked him to look it up in his IHOG. As he was doing so, I approached the helitack crew for LNF Helicopter 510 and asked if they had anything that showed the safe circle requirements and they produced a card that stated that a circle of 90 feet in diameter is required for a Type 2 helicopter. I showed this to the helibase manager and asked him if he felt that the helibase was of adequate size for the number of ships he had. He

stated that the helicopters might be closer than 90 feet, but in the heat of battle you do what needs to be done in order to get the job done. I felt his answer to be inadequate. (I later measured the size of the helipad and it is 175' X 157'). I also mentioned my concern to the Incident Commander, and he stated that he would look into the situation. I later had another conversation with the helibase manager, another individual from CDF, and a Forest Service Strike Team Leader on the incident. I suggested to the helibase manager that the large field across the highway was available and it could easily handle all his helicopters, and many more. They later began moving their operation to the new field, but by then they had started releasing resources.

Corrective Action: The corrective measures taken at the time were to contact the helibase manager, explain the safety concern, bring the concern to the attention of the Incident Commander, and suggest an alternate site for the helibase. After discussing this with the Shasta Lake Distict Ranger, we felt it would be necessary to set limitations on the number of helicopters allowed at this helibase. After discussion with the Regional Safety Officer, and the Regional Helicopter Operations Officer, as well as the District Ranger, we felt it would be appropriate to issue a SafeCom to bring this situation to the attention of all helicopter operations personnel to ensure that safety procedures are followed. "In the heat of the battle, you do what needs to be done in order to get the job done!" This may be true in a John Wayne movie but it's definitely the WRONG answer here. We all know, well maybe not all, what the policy and IHOG say about safety circles. Stick to that and keep it safe. RASO, R-5

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SafeCom #: **01-184** Date: **06/6/2001** Time: **1630**

Location: **Atlanta** State: **Georgia** Region: **8**

Mission Type: **N/A** Procurement: **Fleet**

Aircraft Type: **Beechcraft 90**

Narrative: Aircraft recently came out of Phase 3 & 4 maintenance inspections. The ELT was removed and aircraft placarded by the maintenance facility that the operator had 90 days to repair the ELT. FS maintenance inspector and FS pilots were unaware that the MEL for the aircraft has additional flight restrictions when an ELT is determined to be inop. - one time ferry flight for repairs - can operate within 50 miles of the local airport Aircraft was placed into service without compliance with these MEL restrictions.

Corrective Action: Upon discovery by the RAO, the aircraft has been taken out of service until an operational ELT is placed in the aircraft. Follow-up on why the MEL was not complied with is being examined.

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SafeCom #: **01-237** Date: **06/20/2001** Time: **1530**

Location: **Intercity Airport NCSB S52** State: **Washington** Region: **6**

Mission Type: **Smokejumper** Procurement: **Fleet**

Aircraft Type: **Shorts C23**

Narrative: Jumper 68 was ordered to fly to NCSB to cover for Jumper 07 during unscheduled maintenance. The flight crew followed normal flight following procedures with Central Oregon dispatch and with Central Washington dispatch upon crossing the Columbia River. Upon landing at the Intercity Airport at North Cascades Smokejumper Base, it was discovered that no FM radio communications were possible due to a problem with the tone encoder in the aircraft. The aircraft returned to Redmond Air Center the next day (6/21) to continue the investigation of the problem.

Corrective Action: It was found that the FM transceiver was defective and changed. No further problems were found. /s/XXXXX XXXXXX, Avionics Program Manager. UAO: To communicate with Okanogan Dispatch, because it is not located in the same valley, when flying into NCSB all radio transmissions must go through a mountain top which requires the use of a tone guard. Elsewhere, many aircraft are able to communicate direct, without tone guard, to dispatch. Prior to takeoff or shortly thereafter all aircraft should check and verify that radio's are operating correctly with and without tone guard. Acting RASM: This Safecom highlights some of the unique situations associated with operating in this area and ensuring that all your equipment is functional. Appropriate procedures were followed.

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SafeCom #: **01-235** Date: **06/21/2001** Time: **1700**

Location: **Dutch John Helibase** State: **Utah** Region: **4**

Mission Type: **Fire, Helitack** Procurement: **Contract**

Aircraft Type: **Bell 206L4**

Narrative: Received dispatch for initial attack on a reported smoke. Upon departing from helibase we attempted to establish commo with local dispatch but were unsuccessful. We proceeded with flight, following major highway, continuing attempts to make contact. After eight minutes I instructed pilot to go ahead and land so I could contact dispatch via cell phone, instruct them of our whereabouts, and condition. We continued to work with the aircraft radio, and again were unsuccessful. I elected not to continue mission with just the auxillary radio and had the ship return to Dutch John. Frustrations were running high because the radio was operational on previous flights, and we couldn't figure out what was causing the problem. The pilot back tracked the past two day chain of events and deducted that the antenna may not have been reconnected to cable after the previous day 100-hr inspection. He pulled the cowling where the antenna is mounted, and discovered the cable was infact not connected. Pilot reconnected cable, radio checks were made, and commo re-established. In retrospect we should not have left site of the helibase without establishing commo with dispatch. I chose to continue with flight so we could reach an area where a different repeater could be accessed. However, measures were taken to mitigate the non-radio contact, (1) electing to follow a highway instead of cutting cross-country with the GPS and (2) landing within a reasonable time frame (eight minutes)and contacting dispatch.

Corrective Action: Don't leave site of your helibase without radio contact. Do not assume that communications might improve on the other side of the mountain. The pilot back tracked the past two day chain of events and deducted that the antenna may not have been reconnected to cable after the previous day 100-hr inspection. He pulled the cowling where the antenna is mounted, and discovered the cable was infact not connected. Pilot reconnected

cable, radio checks were made, and commo re-established. RASM Remarks: Great Advise! Also good procedures for lost communications...Don't procede unless you have positive commo. THANK YOU FOR SHARING YOUR EXPERIENCE SO OTHERS MAY LEARN!

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SafeCom #: **01-234** Date: **06/22/2001** Time: **1430**

Location: **Love Field, Prescott** State: **Arizona** Region: **3**

Mission Type: **Fire, Leadplane** Procurement: **Fleet**

Aircraft Type: **Beechcraft 58P**

Narrative: On takeoff from Prescott on leadplane dispatch, pilots (instructor and trainee)noticed forward baggage door come ajar and stayed partially open (1"). We returned and landed, taxied back to runup area, shut down RH engine, latched baggage door, restarted engine, completed T/O checklist and took off to fire. Shortly after 2nd takeoff, mission was cancelled and leadplane returned to PRC.

Corrective Action: **RASM COMMENTS:** Both pilots remember checking bagage door on preflight. Correct procedures followed when door came open (immediate landing). Door was checked for proper latch operation and checked ok.

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SafeCom #: **01-201** Date: **06/14/2001** Time: **1230**

Location: **Sandia Helibase** State: **New Mexico** Region: **3**

Mission Type: **Cargo Letdown** Procurement: **Contract**

Aircraft Type: **Bell 407**

Narrative: At 1200 spotter trainee was completing mock-ups for cargo let down with check spotter present. 1230 check spotter and spotter trainee went live with H-312. Trainee was talking through procedures with pilot. When configuring cargo trainee told pilot cargo is live (meaning let down line is connected to hard loop.) Trainee thought hard loop got hooked up properly to carabiner. When trainee spotter was ready for cargo to be released on pilots count pilot released cargo, load free fell 100 feet and hit the ground. Two cubies full of water broke. After cargo hit the ground check spotter and trainee spotter inspected the hard loop on break away strap it was intacked and the velcro was pulled apart. Spotter and trainee concluded carabiner was not attached to hard loop.

Corrective Action: When configuring cargo going live make sure both loops are attached and pull also verbally say carabiner is locked.RASM COMMENTS: Discussed this with spotter. This is the second event of this type in the Region this year. Will have HOS visit with each rappel base and review procedures.

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SafeCom #: **01-200** Date: **06/9/2001** Time: **1700**

Location: **Heller Fire** State: **New Mexico** Region: **3**

Mission Type: **Fire, Water Drop-Bucket (Helicopter)** Procurement: **Contract**

Aircraft Type: **Bell 407**

Narrative: H-312 was on second fuel cycle of buckets on the Heller Fire. Pilot was on short final for the drop zone when he inadvertently released the bucket (full of water). Pilot stated that he was flaring slightly to reduce forward airspeed, and must have squeezed the cyclic a bit too hard. Helitack who was on the ground directing the drops was approximately 30 yards away from where the bucket impacted the ground. Other ground personnel were well clear of the drop zone. Helicopter was approximately 60 feet AGL when incident occured. Damage: Bucket was torn in several places with the tears running the entire length of the bucket. Three-pin connector was broken in several places. Control head appeared to be undamaged, but we have not checked it yet as a replacement bucket arrived the following day.
Corrective Action: RASM Comments: No mystery here, pilot admitted to hitting the switch inadvertently. Good reminder to all to stay clear of bucket operations.

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SafeCom #: **01-219** Date: **06/19/2001** Time: **1314**

Location: 33 37.89 x 109 17.97 State: **Arizona** Region: **3**

Mission Type: **Fire, External Load (Longline)** Procurement: **Contract**

Aircraft Type: **Bell 407**

Narrative: While longlining two 55gl.fireflyers the leadline ring twisted the swivil's gate open and the leadline with the fireflyer attached was lost at 600 feet AGL.The load looked fine on departure and flew two miles before coming off.The fireflyer attached to the swivel was delivered to the fire without further incident. Cause was the swivels hook was not deep enough for the two rings and the gate was not taped. The fireflyer was destroyed and not recovered yet.
Corrective Action: Submitter Comments: When rigging two rings with small swivels we will protect the swivels gate with fibertape.Looking for larger swivels also. RASM COMMENT: Regional HOS discussed this event with crew. Swivel was one of the "old" style with the light weight gates. This has been a continuing problem over the years with this style of swivel.
****

SafeCom #: **01-221** Date: **06/18/2001** Time: **1000**

Location: **Montague Airport** State: **California** Region: **5**

Mission Type: **Ferry/Repositioning Flight** Procurement: **Contract**

Aircraft Type: **Aero Commander 500S**

Narrative: Air Attack 05 landed at Montague Airport at approx. 9:58 and taxied to parking area. While attempting to avoid three other aircraft in the parking area, the right wing impacted an agency (USFS) owned trailer causing damage to the trailer and the leading edge of the right wing. Forest FAO and R5 maintenance inspector were notified and aircraft was placed out of available status pending repair and inspection.

Corrective Action: Incident was discussed with the pilot and his comments were that he just made an error in not doubling checking his clearence on the right wing. He was preoccupied with the aircraft off of his left wing at the time. Pilot was cautioned about taxing in tight quarters, and to use a wing walker or parking tender if available Ferry permit was obtained by the Contractor through the FAA and the aircraft was returned to Contractors base of operations for repair. Repairs were made and approved by FAA and aircraft approved for return to avaliability status by Regional Maint. Inspector on 6/19, 0900.FAO That wing walker sounds like a wonderful idea for all parties involved! No further action required. RASO, R-5

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SafeCom #: **01-255** Date: **06/23/2001** Time: **1900**

Location: **Pendergrass Fire** State: **Colorado** Region: **2**

Mission Type: **Fire, External Load (Longline)** Procurement: **Contract**

Aircraft Type: **Bell 206L3**

Narrative: Helicopter NXXXX was bring us a sling load. The pilot had made contact and stated he wanted to fly a recon of the area. Once a recon was done the pilot started to approach us from downhill to the drop zone on top of the ridge. As he got closer he started getting too low and load was hitting tree tops. He continued to lower the ship and the load was eventually hung up for about 20 - 30 seconds in numerous small burnt trees. The pilot was able to pull the load out and he continued to drag it up hill to our drop zone. After 1 to 2 attempts to drop the load it ended up on the ground in front of our drop zone. He seemed unable to cut the load away but after 10 - 20 seconds he released it into a hot spot in the fire. There were some punctured cubi containers and bladder bags but no serious damage to cargo. I feel as the contact person I should have supplied the pilot with a "marked" drop zone and possibly some wind indicators. I also feel the pilot should have tried to communicate a little more with us and let us help him. Pendergrass IC

Corrective Action: THis incident was discussed today (6/26/01) between the HEMG, pilot and the IC. The pilot stated he felt the incident was mostly his fault. He stated he took his eyes off the load to watch a firefighter on the ground who was giving him hand signals as to what to do with the load. Thats when the problems began. The firefighter was not experienced with the hand signals. The pilot stated he mistakenly released the load when it was just a couple of feet off the ground. The net was damaged beyond use. The pilot has been very open with me on the fact that he has very little time with a long line. After discussing this with the R-2 HOS we have decided to give the pilot some time to practice. HEMG RASM The pilot is currently carded for longline operations. A flight evaluation was given prior to the contract period and the pilot did pass. His most current helicopter experience has been other than loneline or bucket work. He admitts he is not as proficient as he would like. The Region and the contractor agreed to provide the pilot with several hours of proficiency training with the

loneline. This proficiency training will be observed by a BIA helicopter pilot inspector. 07-03-01. The proficiency training was completed. The BIA Helicopter Pilot Inspector observed all the proficiency training and reported the pilot was safe and qualified to perform all the missions he is carded to perform. Corrective action is complete.

****

SafeCom #: **01-249** Date: **06/19/2001** Time: **1329**

Location: **Hidden Fire** State: **Arizona** Region: **3**

Mission Type: **Fire, Helitack** Procurement: **Contract**

Aircraft Type: **Bell 206L3**

Narrative: HELICOPTER DEPARTED LARGE FIRE HELIBASE WITH APPROXIMATELY 630 POUNDS OF FUEL FOR INITIAL ATTACK ON THE ADJOINING FOREST. AFTER FLYING ONE HOUR WE ARRIVED AT HELISPOT WITH APPROXIMATELY 364 POUNDS OF FUEL. THE WIND WAS 15-20 KNOTS OUT OF THE SOUTH-SOUTHWEST. ONCE HELICOPTER DESCENDED BELOW THE TREE LINE ON APPROACH, THE HELICOPTER LOST THE 15-20 KNOTS OF WIND REQUIRING MORE POWER TO ARREST THE DESCENT AT THE BOTTOM, RESULTING IN AN OVERTORQUE OF 115.5% FOR TWO SECONDS (according to the onboard PAR system).

Corrective Action: CONTACTED THE COMPANY MECHANICS. THE MECHANICS FLEW TO THE HELISPOT WHERE THEY PERFORMED AN OVERTORQUE INSPECTON, AND OK'ED THE AIRCRAFT FOR RETURN TO SERVICE. THEN CONTACTED THE REGIONAL AVIATION MAINTENANCE INSPECTOR WHO APPROVED HELICOPTER FOR RETURN TO CONTRACT AVAILABILITY. APPROVAL WAS RECEIVED AT 0800 THE MORNING FOLLOWING THE OVERTORQUE. RASM COMMENTS: RAO, RASM, HOS and HIP visited with helicopter manager regarding this event. Aircraft was within HOGE limits according to load calculations. Helispot was in a large area, however it was surrounded by trees, creating a "dead air" situation. The transision from a strong steady wind condition to zero wind was very rapid.

****

SafeCom #: **01-276** Date: **06/23/2001** Time: **0830**

Location: **Lone Pine Campground Helispot** State: **California** Region: **5**

Mission Type: **Fire, External Load (Longline)** Procurement: **Contract**

Aircraft Type: **Aerospatiale 350B3**

Narrative: H-525 was moving 4 large plastic containers (approx. 45 lbs. each) on a 100 foot long line from the Lone Pine Campground Helispot to Trail Camp on Mt. Whitney. These bins have been modified to carry human waste but were mostly empty. In the past the bins had been tied together in groups of four with P-cord and a lead line snaked through the handles and hooked onto one of the bins, and then attached to the remote hook. While this procedure had been used in the past, no one on the present crew had moved these containers.

Approximately 30 seconds into the first flight, one of the bins dropped from the remote hook. The bin fell approximately 100 feet but sustained no damage. The Helicopter was instructed to return to the helispot and another load was substituted and sent up, this time in a net. When the barrel was retreived, it was determined that the handle seperated from the bin, the weight of the other empty bins creating enough force to cause the handle to seperate. All subsequent loads were netted and no further problems were encountered.

Corrective Action: Procedure for this particular mission, which occurs several times each year, has been changed and the district staff has been informed that the old method is no longer acceptable. FAO/FMO met with Helitack staff and it was agreed that future loads will be netted. Concerns were also raised about working with human waste containers and crew members will be properly outfitted and briefed in handling this mission. Hummm! Naw, I'm not going to go there! Sounds like the problem is well under control. I concur that the nets are the right choice. No further action required. RASO, R-5

****

SafeCom #: **01-257** Date: **06/27/2001** Time: **1205**

Location: **Doyle Fire** State: **Arizona** Region: **3**

Mission Type: **Fire, Air-Attack** Procurement: **CWN**

Aircraft Type: **Cessna 414**

Narrative: Returning to airport from Fire mission, a warning light came on indicating a failure of the left engine alternator. The aircraft was placed out of service.

Corrective Action: The F.B.O's A & P removed the alternator and determined that the bearings were going out of the alternator and that approximately half of the rubber had been eaten out of the alternator drive coupling. New parts were orderred and the F.B.O's A & P replaced them on 6/28. Contacted R-3 aviation maint. At his suggestion, the oil filter for the left engine was removed and disassembled. Inspection of the filter element showed a good amount of rubber debris trapped in the filter. A small amount of oil drained from the engine sump showed no trace of rubber particles. A new oil filter was installed on the engine. The engine was run-up and all systems checked normal. Aircraft placed back in available at 1230, 6/28/01.

****

SafeCom #: **01-192** Date: **06/9/2001** Time: **1730**

Location: **LPF – 690 Rock Fire** State: **California** Region: **5**

Mission Type: **Fire, Air-Attack** Procurement: **Contract**

Aircraft Type: **Rockwell 690B**

Narrative: On 6/9/01 at approx 1710 hrs AA07 was dispatched to LPF-690 Rock Fire N/W of San Marcos VOR. The engine start ups and run ups were normal and I was cleared for take-off on Runway 15 Left. While increasing the power levels to take-off power I noticed that the right engine power increased to take off power faster than the left engine power. All other

indications were normal and I continued the take off. Upon reaching the fire location I reduced power on both engines and found that the right engine would only reduce to 300 horsepower, (normal would have been 50-60 horsepower). We were released from the fire almost immediately and I returned to Santa Barbara Airport. Upon entering the down wind the right engine was producing 400 hp. With the engine producing the excessive power I was unable to slow to landing speed with the gear and flaps deployed. I elected to secure the right engine for landing. Once the engine was shut down and secured I made a normal landing and taxied back to the Air Attack Base. Aircraft out of service at 1730 hours.

Corrective Action: June 10, 2001 removed right engine cowling, checked rigging from power level shaft to propaller pitch control, checked power lever cable and bellcrack all checked good. Inspected fuel, air, and oil lines all checked good. The pilot preformed a groung start, all values are within limits. Found speed switch would not disingage, reset unit with battery master, ops check OK, shut down, recowled and restarted. Speed switch checked good, test flight of aircraft all systems ops checked good. Aircraft was OK'd for return to service by company A&P. XXXX XXXXXXX OK'd return to contract availability at 1000 hrs. A new speed switch has been ordered P/N 305538-6 and will be installed. No further action required. RASO, R-5

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SafeCom #: **01-187** Date: **06/7/2001** Time: **1550**

Location: **Ocala Fire Center** State: **Florida** Region: **8**

Mission Type: **Fire, Water Drop-Bucket (Helicopter)** Procurement: **CWN**

Aircraft Type: **Boeing Vertol 107**

Narrative: While returning from a fire at approximately 1550, the #1 engine repeatedly went into freeze (4 or 5 times)within a 2-minute time span without any collective movements. The #1 engine then freeze failed again but slowly increased power to topping(102.2). The engine failed to respond to collective or "beep" inputs. The #1ECL was retarded to the "start" position for approzimately 1 minute then again to fly without any futher problems.

Corrective Action: Maintenance action take was to remove and replace both the # 1 ECA and Logic boxes. The aircraft was test flown and returned to contract availability after a call to the region maintenance person.

****

SafeCom #: **01-222** Date: **06/20/2001** Time: **0825**

Location: **Fresno Yosemite Airport** State: **California** Region: **5**

Mission Type: **Ferry/Repositioning Flight** Procurement: **Contract**

Aircraft Type: **Aero Commander 690A**

Narrative: Aircraft departed San Bernardino without incident for return to Fresno. When pilot lowered landing gear on approach "green down indicator lights" were not on. Pilot cycled gear and lights flickered on. Gear were down and locked both times. Pilot landed aircraft landed at

Fresno. Examination revealed a broken wire to lights. Wire repaired and aircraft placed into available status. Gerry Burney South Zone Mantenance Inspector advised.

Corrective Action: Aircraft returned to available status. No further action required. RASO, R-5

****

SafeCom #: **01-263** Date: **06/29/2001** Time: **0830**

Location: **KIA Ketchikan,** State: **Alaska** Region: **10**

Mission Type: **Passenger Transport** Procurement: **Contract**

Aircraft Type: **Dehavilland Beaver**

Narrative: At 0830 xxxx xxxxx called to inform dispatch of a starter problem and requested permission from (FAO) to step taxi from the airport dock to the dock. John ok'd the trip. At the time he had 2 pax on board. They swiched out planes and the trip continued on with the flight. At 1108 the mechenic called to inform dispatch that the starter was replaced and ready to put back into operation. XXXX called the RAO at that time and they put xxx back in service.

Corrective Action: RAMI: Reviewed the problem with company director of maintenance and the starter had failed internally. The starter was replaced and the old unit sent out for overhall. RASM: No further action.

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SafeCom #: **01-232** Date: **06/19/2001** Time: **2050**

Location: **Moses Lake** State: **Washington** Region: **6**

Mission Type: **Fire, Retardant Drop (Airtanker)** Procurement: **Contract**

Aircraft Type: **Douglas DC7**

Narrative: Upon landing #1 prop remained in reverse. Attempts to adjust pitch failed and the aircraft was placed out of service by the pilot and mechanics were called. Mechanics replaced the feather pump and run-up was performed and no problems were encountered. The aircraft was placed into Contract availability by XXXX XXXXX, R-6 Maint. Inspector at 0910 on 6/20/01.

Corrective Action: UAO: Process and procedures were followed. Acting RASM: No additional followup.

****

SafeCom #: **01-244** Date: **06/24/2001** Time: **1115**

Location: **Nevada CO** State: **California** Region: **5**

Mission Type: **Fire, Air-Attack** Procurement: **CWN**

Aircraft Type: **Cessna 337**

Narrative: On 6-24-01 XXXXXXX provided a C.W.N aircraft on contract, a 337 to fly a Airattack missions on the martis fire. While on the ground at Nevada Co. Airport loading radio freq's, the pilot noticed the rear engine prop had gone to a full feather position. Pilot was unable to return the prop for take off.

Corrective Action: Aircraft was released. No further action required. RASO, R-5

****

SafeCom #: **01-256** Date: **06/26/2001** Time: **0730**

Location: **Missoula** State: **Montana** Region: **1**

Mission Type: **Passenger Transport** Procurement: **Fleet**

Aircraft Type: **Beechcraft 58P**

Narrative: ON 06-25-01 THE T.I.T. GAUGE WAS REPLACED. ON THE SAME NIGHT THE AIRCRAFT MADE A ROUND-TRIP (MSO-MYL-MSO) AND THE NEW GAUGE WAS REPORTED TO WORK FINE. ON 06-26-01 AT 0730, WE WERE DEPARTING MSO FOR BOI. AFTER DEPARTURE BOTH THE LEFT AND RIGHT SIDE OF THE NEW GAUGE INDICATED EXCESSIVE TEMPS BOTH DIGITALLY AND WITH WARNING LIGHTS (all on the new gauge). ALL OTHER ENGINE INSTRUMENTS READ NORMAL INDICATIONS, HENCE I CONTINUED TO BOI. IN BOISE I CALLED THE REGION 1 MAINTENANCE TECHNICIAN IN MSO TO GIVE HIM A HEADS UP FOR REPAIRS ON THE INOPERABLE GAUGE. WE THEN LEARNED THAT THE GAUGE WAS NOT AN ITEM LISTED IN THE M.E.L., THUS REPAIRS WERE NEEDED IN BOISE. EXECUTIVE AIR COMPLETED THE REPAIR IN 2 HOURS AND HAD DIAGNOSED THE PROBLEM AS "THE WIRES WERE HOOKED-UP BACKWARDS AND A POSSIBLE CRIMPING PROBLEM.". AFTER ENGINE RUN-UP FOR QUALITY GROUND CHECK OF REPAIRED WIRING WE DEPARTED FOR MSO AT 1830 AND THE GAUGE WORKED PERFECT ENROUTE. IN PAST EXPERIENCE, I HAVE FOUND E.G.T. GAUGES TO BE A DEFERABLE ITEM ON M.E.L.'s.

Corrective Action: The T.I.T. Guage appears to have been wired incorrectly during replacement. An iquiry is ongoing to determine where and when the error was made.

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SafeCom #: **01-186** Date: **06/6/2001** Time: **1530**

Location: **6 mile west of Bishop Airport** State: **California** Region: **5**

Mission Type: **Passenger Transport** Procurement: **Contract**

Aircraft Type: **Aero Commander 690A**

Narrative: Approximately 10 minutes into flight to Fresno, and at an altitude of 14,000 feet pilot noticed a decrease in cabin pressure. Passengers indicated a discomfort in cabin temperature during takeoff as normal cooling did not take place. Continued with descent into Fresno and landed without incident. Examination of the scat tubing, main pressurization line in the rear section of the aircaft had come loose resulting in a loss of pressurization. The scat tubing is encased in a velour covering which did not separate and hid the tubing separation until it was removed. This also resulted in a loss of air flow in the cabin and contributed to the warmth in the cabin. Scat Tubing reinstalled advised South Zone Maintenance Inspector and aircraft placed into availability.

Corrective Action: No further action required. RASO, R-5

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SafeCom #: **01-250** Date: **06/25/2001** Time: **1500**

Location: **Jeffco Airport** State: **Colorado** Region: **2**

Mission Type: **Ferry/Repositioning Flight** Procurement: **Contract**

Aircraft Type: **Lockheed C130**

Narrative: A gusty tail wind caused the #2 engine RPM to decay to 94 percent after turnign off runway. Crew contacted tower to have emergency crews standby for possible fire on #2 engine as a safety precaution. Found problem to be the compressor bleed valves opened and the engine was shutdown by flight crew. Upon restart, compressor bleed valves stayed open. T-XXX taxied to Jeffco Tanker Base to invesigate problems with the #2 compressor.

Corrective Action: Use greater caution when taxining in tail wind conditions. Have maintainence team enroute from company to complete PM checks on #2 compressor. No availability time was lost. Aircrew did an excellent job in identifying this problem on the C-130 aircraft. Job well done! RASM: June 27, 2001. Company maintenance checked the engine for damage to the bleed air system and any other posible damage. No damage was found. The engine was run-up and power checks made. All indications were normal. The local fire departments involvement was strickly as a precaution. The Regional Aviation Officer returned the airtanker to contract availability on the morning of the 26th.

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SafeCom #: **01-238** Date: **06/19/2001** Time: **1730**

Location: **Intercity Airport NCSB S52** State: **Washington** Region: **6**

Mission Type: **N/A** Procurement: **Contract**

Aircraft Type: **Casa 212**

Narrative: The aircraft became unavailable for the dates of 6/20 and 6/21 after the pilot/A&P mechanic discovered that the flaps were bleeding up slowly when extended in flight. Upon inspection of the 4-way hydraulic valve, a part of the flaps actuator system, he noticed the

return line sleeve was cracked and remained within the valve housing instead of the normal position. Replacement parts were ordered to replace the 4-way hydraulic selection valve.

Corrective Action: UAO: Process and procedures were followed. Aircraft was put back in contract availability by Regional Aviation Operations Officer. Acting RASM: Procedures followed, no additional followup.

****

SafeCom #: **01-243** Date: **06/23/2001** Time: **1645**

Location: **Bass Lk. Ontario, Canada** State: **Minnesota** Region: **9**

Mission Type: **Fire, Retardant Drop (Helicopter)** Procurement: **Contract**

Aircraft Type: **Sikorsky 64E**

Narrative: While engaged in water dropping ops within the five mile common zone of mutual aid fire suppression in Ontario's Quetico Wilderness, pilot noticed the transmission oil pressure warning light had come on. The transmission oil pressure fluctuated and finally went to zero. Transmission temperature red lined soon after the loss of oil pressure which made it imperative to land as soon as possible. After a quick recon by Air Attack, it was clearly evident that there was only one choice for a landing zone in a boggy area at one end of the lake. Pilot Woodbury eased the crane down several times but the weight of the aircraft caused the crane to sink and list to the point where it would roll onto it's side. Woodbury was able to move closer to a more stable location where he was able to successfully land and shut down. In the process of landing the A/C, the rotors made contact with small trees growing in the bog. The A/C remained upright and started to settle in the mud. A/C continued to settle until the mains were submerged and the rear stinger was in the mud, coming to rest on its retardent tank. Company mechanics were flown by U.S.F.S. Beaver seaplanes and assesed the problem. It was then decided that the aircraft was not airworthy as the transmission had over heated to the point of burning the paint on the outside of the case. One rotor blade sustained minor damage. A crease was found in one panel of the blade but mechanic claimed it is flyable. Air Attack and helicopter flight crew did an excellent job coordinating a very serious emergency situation. Total time elapsed from emergency declaration to engine shut down was estimated to be two minutes by FS pilot on scene. Dryden, Ontario Fire Center, Quetico Provincial Park officals, Transport Canada, Canadian Customs and U.S. Customs have been made aware of the situation and close coordination with them will be maintained. The Canadians have been very cooperative and have offered their support and assistance if need be. Steve Tome, R-9 H.O.S. was made aware of the situation and in turn notified Mike Hopf, R-9 R.A.O. and Gary Morgan, R-9 R.A.S.M.

Corrective Action: At the present time, the "plan" is to insert mechanics in to prepare the aircraft for airlift by an "F" model S-64 to transport the aircraft back to Ely for repair. 6000 lbs. of fuel still in the fuel tanks will need to be removed to facilitate the lift job. At this time mechinics are to disconnect drive shafts and burn the fuel off. After discusion about defueling this was considered the environmently safe way taking into account possible resource damage to the watershed in this wilderness park. This is in an extermely remote location with thousands of interconnecting lakes, rivers and streams. Initial attempts to recover by lifting were unsuccessful as of 6/25. Additional work is planned to breakdown the aircraft and dig out

the main landing gear which has sunken to a depth of about 3 - 4 feet. Documentation of the incident is ongoing and an informal report of the incident and salvage operations will be made. On 6/27, the aircraft was jacked up out of the mud by placing jacks on wood platforms and pumping water around and under the tires to reduce suction. The tank and main rotor blades were removed and lifted back to the tanker base. Tanker 747 was lifted and transported to the base on the 27th around noon, and all support equipment was backhauled to clean up the area. Forest Service Beaver aircraft provided support and maintained radio communications with traffic around the Ely airport (non-tower)during the landing phase. Minor damage sustained to a side windshield of 747 during the lift sequence, when a door flew open and contacted the side windscreen. Maintenance personnel replaced the transmission and it was inspected and returned to service by a Forest Service maintenance inspector the afternoon of the 28th.

****

SafeCom #: **01-165** Date: **06/2/2001** Time: **1910**

Location: **Phill Pond Fire** State: **Florida** Region: **8**

Mission Type: **Fire, Water Drop-Bucket (Helicopter)** Procurement: **CWN**

Aircraft Type: **Boeing Vertol 107**

Narrative: On 06-02-01 at 1710hrs, will while working water drops on the "Phill Pond Fire" helicopter 72D lost oil preasure in the aft transmision. The pilots landed away from the fire at the first landing site available. At a little after 2000hr their mechanics showed up, looked at the leak area and found that the aft transmition, upper oil line to cooler was leaking. The mechanics fixed the line by re-tightening fittings and re-saftied the line. They refilled the transmision and performed a run-up satifactorly. Regional maintanance inspectors were notified and the ship was returned to availablity the following morning.

Corrective Action: Acting RASM: Aircraft returned to availablity after repair by Regional Maintenance Inspector. No furhter action.

****

SafeCom #: **01-161** Date: **06/1/2001** Time: **1100**

Location: **Ogden** State: **Utah** Region: **4**

Mission Type: **Inspection, AircraftXXXX** Procurement: **Fleet**

Aircraft Type: **Dehavilland DHC6**

Narrative: On approach to a local airport a civilian noticed the aircraft was streaming something from the right side of the fuselage. The pilots performed a slower flight on go around and recieved same comments. After landing the Crew inspected the aircraft and found JET-A fuel coming from belly panels and gear farings.

Corrective Action: After further trouble-shooting the crew found a worn forward tank fuel service cap, the oring is worn and the cap no longer has a strong "overcentering" locking feature. New Fuel caps for both tanks were placed on order. Additional note, when the cap was locked down in place, there was some "play" in the cap and fuselage seat it rides in.

RASM Remarks: We'll take the help anyway we can get it....Great call by the civilian to alert the pilot of the stream trailing the aircraft. Please pass this safecom on....Please check your fuel caps for wear!

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SafeCom #: **01-209** Date: **06/1/2001** Time: **1540**

Location: **5 mi. west of Big Hill** State: **California** Region: **5**

Mission Type: **Fire, Helitack** Procurement: **CWN**

Aircraft Type: **Bell 212**

Narrative: Upon return flight from CDF-NEU fire a transmission chip light illuminated a few minutes prior to landing at base. After landing, mechanic inspected chip detectors and found 3 small flakes and a couple of small slivers. Cleaned plug and ground run for 30 min. at 100%, no other problems. USFS Maintenance Inspector authorized return to availability.

Corrective Action: No further Action required at this time. RASO, R-5

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SafeCom #: **01-211** Date: **06/16/2001** Time: **1830**

Location: **Kingsbury Fire LTBMU** State: **California** Region: **5**

Mission Type: **Fire, Water Drop-Bucket (Helicopter)** Procurement: **CWN**

Aircraft Type: **Bell 212**

Narrative: While conducting water drops on the Kingsbury Fire LTBMU, a transmission chip light illuminated. Pilot landed at South Lake Tahoe Airport where mechanic inspected chip detector and found a few small slivers. This was the third transmission chip light in 19.3 flight hours. Aircraft removed from contract availability and ferried to Reno NV for repairs.

Corrective Action: This is a perfect example of how the Safecom system works and if used properly, is an excellent tool tracking problems. See Safecoms 01-209 & 210. The inspector had informed the operator that if they had another chip light, they would be placed out of service. This is very much inline with Bell maintenance procedures. When the 3rd chip light occured, the OPERATOR took the helicopter of service and into their home base for repairs. The inspector received a fax copy of the repairs made and returned the helicopter to service. Lets continue to use this system. It's in place to enhance safety and prevent accidents. It works. No further action required at this time. RASO, R-5

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SafeCom #: **01-258** Date: **06/30/2001** Time: **0830**

Location: **Roosevelt, Bearhead** State: **Arizona** Region: **3**

Mission Type: **Fire, Passsenger Transport** Procurement: **Contract**

Aircraft Type: **Bell 407**

Narrative: Three minutes into flight from base the transmission chip light came on. Helicopter immediately turned around over lake and proceeded into back to base for landing. R-3 maintenance inspector was contacted. Transmission chip plug was inspected and cleaned and re-inserted. Helicopter was run for 15 minutes with no re-occurence of chip light. R-3 maintenance inspector was contacted and helicopter was put back in available.

Corrective Action: Helicopter mgr. acted correctly in returning to helibase since it was within short distance. Chip light occurred over lake and it was not possible to land immediately. Once aircraft cleared the water and back on land it was close enough to land at helibase.

****

SafeCom #: **01-217** Date: **06/19/2001** Time: **0800**

Location: **Boise** State: **Idaho** Region: **WO**

Mission Type: **N/A** Procurement: **Fleet**

Aircraft Type: **Shorts C23**

Narrative: While in maintenance main oxygen valve was turned back on following re-installation. The seal on the high pressure transducer began leaking badly. This is the third occurance of this problem. I still have not recived appropriate aknowagement from the installing contractor. This problem only applies to he C-23A aircraft modified at Aero Air Inc. The original C-23A aircraft are not equiped with LOW PRESSURE ANNUNCIATORS.

Corrective Action: I recomend the oxygen system bottle be turned off, the system identified inopritive and defered per the aircraft Minimun Equipment List. On the non-certified USFS aircraft the high pressure transducer can be capped off from the system, disabling the LO OXYGEN annunciator, the annunciator light identified as inoprative and enterer in the Delayed Discrepancie Log of the FS 5700E.

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SafeCom #: **01-205** Date: **06/15/2001** Time: **1400**

Location: **SBD** State: **California** Region: **5**

Mission Type: **Fire, Water Drop-Fixed Tank (Helicopter)** Procurement: **CWN**

Aircraft Type: **Sikorsky 64**

Narrative: At 1400 hours, Pilot Steve Bligh relayed that they had found a cracked engine accessory ear mount on the number two engine upon inspection. Maintainence inspector advised and A/C was placed on unavailable until repaired and advised by inspector.

Corrective Action: Helicopter repaired and reinspected on 6-16-01. Inspector returned it to service. No further action required. RASO, R-5

****

SafeCom #: **01-260** Date: **06/28/2001** Time: **0900**

Location: **Kenai Lake** State: **Alaska** Region: **10**

Mission Type: **Fire, Water Drop-Bucket (Helicopter)** Procurement: **CWN**

Aircraft Type: **Sikorsky 61E**

Narrative: During preflight check on 6/38/01 Bim indicator on red M/R blade showed red(bad).

Corrective Action: HEMG - Aircraft removed from service - bim indicator replaced. A/C returned to availability by OAS. RASM - no further action.

****